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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,023	08/17/2000	Yoram Cedar	HARI.158US0	4831

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EXAMINER
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AUVE, GLENN ALLEN

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 12/04/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/641,023

Applicant(s)

CEDAR ET AL.

Examiner

Glenn A. Auve

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 and 24-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 24-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10, 13, 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-20 and 24-32 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by the SD Memory Card Specifications Part 1 Physical Layer Specification Version 1.0, March 2000 (SD specification 1.0), submitted by applicant under the provisions of MPEP §724.

As a preface to this rejection, the examiner notes that applicant has filed the above identified SD Card specification reference along with a declaration under 37 CFR §1.132 by the applicants. The declaration at paragraph 2 indicates that the applicants "...worked with other employees of SanDisk and engineers of Toshiba Corporation ('Toshiba') and Matsushita Electric Industrial Co., Ltd. ('MEI'), both of Japan, to generate a set of structural, electrical and operational standards for the card. One result of this work was a document entitled 'SD Memory Card Specifications Part 1 Physical Layer Specification Version 1.0,' dated March 22, 2000 ('SD Specification 1.0'). We participated in discussions of the subject matter described in this document and in its drafting." This statement appears to indicate that the subject matter in the SD Specification 1.0 was known or used by others in this country, or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

As per claim 1, the SD Specification 1.0 shows a host a plurality of sockets in which cards are insertable, and transferring data between the host and a card addressed over a command circuit connected between the host and the sockets and the data being transferred through a data circuit, and normally transferring control operations of the cards from the host to

a card over the command circuit connected between the host and the sockets except when unique addresses of individual cards are being defined by communication between the host and the cards one at a time over the command circuit which is connected to the sockets one at a time (at least in section 3.1.1 and also on page 20). The SD Card specification shows all of the elements recited in claim 1.

As for claim 2, the argument for claim 1 applies. The SD Card specification also shows storing within the cards a characteristic of a number of data contacts through which data are transferable in parallel, causing the host to read the stored characteristic of the cards, and transferring data between the host and the card includes transferring data over one or more of the data lines connecting the host with the sockets according to the stored characteristic (the "set\_bus\_width" command as noted at least in section 4.3.1 and page 44). The SD Card specification shows all of the elements recited in claim 2.

As for claim 3, the argument for claim 2 applies. The SD Card specification also shows that the host provides a clock signal to each socket to operate the cards with a common frequency clock signal (at least in section 4.4). The SD Card specification shows all of the elements recited in claim 3.

As for claim 4, the argument for claim 1 applies. The SD Card specification also shows that the cards include re-writeable non-volatile memory in which transferred data are stored (throughout the specification, at least in section 3). The SD Card specification shows all of the elements recited in claim 4.

As per claim 5, the SD Card specification shows storing within the individual cards a characteristic of a number of data contacts through which data are transferable in parallel; causing the host to read the stored characteristic from the card inserted in a socket, and transferring data between the host and the card over one or more of the plurality of lines

according to the characteristic stored in the card (the "set\_bus\_width" command as noted at least in section 4.3.1 and page 44). The SD Card specification shows all of the elements recited in claim 5.

As for claim 6, the argument for claim 5 applies. The SD Card specification also shows that the host provides a clock signal to each socket to operate the cards with a common frequency clock signal (at least in section 4.4). The SD Card specification shows all of the elements recited in claim 6.

As for claim 7, the argument for claim 6 applies. The SD Card specification also shows that the cards include re-writeable non-volatile memory in which transferred data are stored (throughout the specification, at least in section 3). The SD Card specification shows all of the elements recited in claim 7.

As for claim 8, the argument for claim 7 applies. The SD Card specification also shows that the host determines whether the inserted card is an MMC type and if so transfers data over only one of the data lines (page 20). The SD Card specification shows all of the elements recited in claim 8.

As for claim 9, the argument for claim 7 applies. The SD Card specification also shows that transferring data includes directing individual bits of a serial data stream in sequence through a number of data lines corresponding to the characteristic stored in the card (the "set\_bus\_width" command as noted at least in section 4.3.1 and page 44). The SD Card specification shows all of the elements recited in claim 9.

As per claim 10, the SD Card specification shows encapsulated memory cards that include programmable non-volatile memory and a controller, electrical contacts on the card at least one for carrying data, one for commands and responses, and one for a clock signal, and a plurality of registers that are programmable, including a programmable address register, a

plurality of sockets that receive the cards with pins corresponding to those on the cards, and a host device connected to the data, command, and clock lines and to normally simultaneously send operating commands to the cards over the individual command/response lines, except when distinct addresses in the address registers are being confirmed through the command/response lines one at a time (at least in section 3.1.1 and also on page 20, section 5 which details the various card registers, and page 114 which shows the card layout). The SD Card specification shows all of the elements recited in claim 10.

As for claim 11, the argument for claim 10 applies. The SD Card specification also shows that the at least one command data line includes two or more data lines, the cards provide a response of the number of contacts that carry data to and from the card and the host transferring data over one or more of the two or more data lines (at least in section 3.1.1 and also on page 20, section 5 which details the various card registers, and page 114 which shows the card layout). The SD Card specification shows all of the elements recited in claim 11.

As for claim 12, the argument for claim 11 applies. The SD Card specification also shows that the host provides a clock signal to each socket to operate the cards with a common frequency clock signal (at least in section 4.4). The SD Card specification shows all of the elements recited in claim 12.

As per claim 13, the SD Card specification shows a plurality of memory cards that include programmable non-volatile memory and electrical contacts on the card at least one for carrying data, one for commands and responses, and one for a clock signal, and a plurality of registers that are programmable, including a programmable address register, a plurality of sockets that receive the cards with pins corresponding to those on the cards, and a host device connected to the data, command, and clock lines with the command line selectively connectable to any one or all of the card sockets, the cards including an address register which is

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programmed with a unique value confirmed by the host through the command line one card at a time, and the host sending additional commands to and receiving additional responses from an individual one of the cards when all of the sockets are connected (at least in section 3.1.1 and also on page 20, section 5 which details the various card registers, and page 114 which shows the card layout). The SD Card specification shows all of the elements recited in claim 13.

Claims 14-16, 18-20 and 24-32 all generally include the same or similar limitations as the forgoing claims with regard to the way in which the cards are initialized and/or how the number of data transfer pins are determined by the host for interaction with the cards. Therefore, claims 14-20 and 24-32 are also all rejected as being clearly anticipated by the SD Card specification as noted above regarding claims 1-13.

With respect to claim 17, the rejection for claim 16 applies. The SD Card specification also shows that the card is 32 mm long, 24 mm wide, and either 1.4 or 2.1 mm thick (at least on page 108). The SD Card specification therefore shows all of the elements recited in claim 17.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(f) he did not himself invent the subject matter sought to be patented.

4. Claims 1-20 and 24-32 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. As noted above with respect to the rejection under 35 USC §102(a), applicant has provided a copy of the SD Card specification along with a declaration filed under 37 CFR §1.132 which indicates at least in paragraph 2 that the applicants along with others at SanDisk and engineers from Toshiba and MEI worked together to create the SD Card specification and the document entitled *SD Memory Card Specifications Part 1 Physical Layer Specification Version 1.0*, March 2000. The cover page of the document

itself also seems to at least imply that it is a product of work by the three companies as part of the SD Group. Applicant's declaration includes paragraph 6 which states that "The descriptions in the forgoing [*sic*] identified documents of the subject matter claimed in the Present Application are descriptions derived from us of subject matter conceived and invented by us." However there is no indication as to exactly which claimed subject matter is covered by which parts of the identified documents, nor is there any indication that such parts of the documents are solely the work of the applicants. Therefore it appears as though the claimed subject matter was actually not solely the invention of the applicants.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1,4,10, and 13 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Information Disclosure Statement***

6. Applicant's IDS filed under the provisions of MPEP §724 has been considered as noted above. Furthermore, the initialed copy of the PTO-1449 including both of the cited references is being provided with this action. As noted above, the *SD Memory Card Specifications Part 1 Physical Layer Specification Version 1.0*, March 2000, document has been applied in the art rejection. The other document *Supplementary Notes for: SD Memory Card Specifications Part 1 Physical Layer Specification Version 1.0, March 2000* dated June 2000 is deemed to not be important with respect to the patentability of the claims.



**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (703) 305-9638. The examiner can normally be reached on M-Th 8:00 AM-5:30 PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Glenn A. Auve  
Primary Examiner  
Art Unit 2181

gaa  
December 1, 2003